

CORNELIUS H. MULLER

1909–1997

Professor of Botany, Emeritus
Santa Barbara

Cornelius H. Muller, botanist, Eminent Ecologist, and internationally recognized authority on the oaks, died January 26, 1997.

Neil, a Texan by temperament and schooling, was born July 22, 1909 in Collinsville, Illinois. All of his early schooling was in public schools in Cuero, Texas. He often credited his later success to 'the observational habits of my cowboy youth.' He received his B.A. and M.A. from the Department of Botany, University of Texas, Austin in 1932 and 1933. Neil received in Ph.D. from the University of Illinois, Urbana in 1938, in the Department of Botany. His dissertation was in the field of Plant Ecology with Dr. A. G. Vestal. His early botanical explorations led to 10 publications and descriptions of several new species, while still in graduate school. His first position was as Ecologist for the Illinois State Natural History Survey in 1938. He also held a position as Assistant Botanist (1938–1942) in the Division of Plant Exploration and Introduction, Bureau of Plant Industry, U.S. Department of Agriculture. In 1939, Neil married Katherine Kinsel. In 1942, he joined the Special Guayule Research Project in the southwest desert. This work was seminal in his latter research into plant interactions.

In 1945, Katherine resigned her position at the Santa Barbara College for a position at the Santa Barbara Botanic Garden. Neil was offered the position vacated by Katherine, and was appointed Assistant Professor of Science at the Santa Barbara College. Shortly after his employment, he founded a collection of botanical specimens, which later became The UCSB Herbarium, to aid in his classes in plant taxonomy. In 1947, he was appointed Research Associate at the Santa Barbara Botanic Garden. Neil became Assistant Professor of Botany in 1948, Associate Professor of Botany in 1950, and Full Professor in 1956. He was Faculty Research Lecturer in 1957. Neil was one of the original faculty at the Santa Barbara Campus when it became the 8th campus of the University of California in 1958. He served as acting Dean of the Graduate Division (1961–1962), and was one of the early participants in the Institute for Tropical Biology in San Jose, Costa Rica (1961–1962). Neil had twelve Ph.D students and two Masters students from 1966–1977. In 1974, Neal became Adjunct Professor in the Department of Botany, University of Texas, Austin. This allowed him to spend the hot

months of the year in Austin. In 1975, he was selected as Eminent Ecologist, the highest honor bestowed by the Ecological Society of America. Neil became Emeritus Professor at UCSB in 1976. In 1982, his paper on "The Role of Chemical Inhibition (Allelopathy) in Vegetational Composition" (1966), was selected by Current Contents as a Citation Classic, designating it as an extremely influential publication in the field of Ecology. By 1982, this paper had been cited over 125 times. Neil continued his interest on the history of early botanical explorations with work on the letters and collections of Jean Louis Berlandier culminating in a two-volume publication co-authored with Katherine Muller.

Cornelius Muller contributed importantly to two major scientific research areas. His active research life, which was most of his 87 years, spanned much of the history of plant ecology in the United States. In his work, he met or corresponded with many of the early workers in the burgeoning discipline of plant ecology. His ecological work tracks the development of the field of plant ecology from vegetation description to analysis to experimentation. His later investigations of plant interactions opened a new discipline of experimental investigations in chemical ecology. All of his ecological work was based on careful field observations and detailed experimentation to test hypotheses about the factors controlling plant distributions.

Neil's early work also addressed the taxonomic problems associated with plants in the American Southwest, and in Mexico and Central America. His extensive collections are to be found in herbaria around the world. His national and international reputation in plant taxonomy was first established by his study of oaks. The taxonomy of the oaks is a particularly challenging problem. Muller's work on the oaks drew from a number of areas in Botany. He published papers on the anatomy of species, the distribution of species, and their correlations with edaphic factors. He was one of a few early workers to recognize the role of hybridization in the relationships of the oak species. Neil's collections, species descriptions, and several volumes describing his work on the oaks made him a leading authority on the genus *Quercus*. This work spanned his entire career. He also named a number of new species, largely oaks. In honor of his work, two new species of oaks were named for him: *Quercus cornelius-*

mulleri Nixon and Steele (California) and *Quercus mulleri* Martinez (Mexico). He was honored by the California Botanical Society through dedication of Volume 35 of its journal *Madroño*. The UCSB Herbarium, now contained within the Museum of Systematics and Ecology at UCSB, is the repository for the Cornelius H. Muller Archives and many of his plant collections.

Neil published over 100 research papers from the 1930s to the 1990s. His early and his most recent investigations were joint efforts with his wife Katherine, who died in 1995. Neil's classes, seminars,

and field trips at UCSB were legendary, and the quarterly Ecology Seminar founded by him is perhaps the longest, consistently offered one in the United States. The breadth and power of C. H. Muller's influence will continue to be felt for generations. It was Neil's wish that upon his demise his ashes be scattered over a field of bull-thistles somewhere in Texas.

—Nancy Vivrette
Wayne Ferren
Bruce Mahall